

1. ~~An optical device, comprising:~~
~~a first optical element for directing a first portion of an incident light beam~~
~~in a predetermined first direction; and~~
~~a second optical element for directing a second portion of said incident light~~
~~beam in a predetermined second direction, said second direction being different than~~
~~said first direction, said second optical element being adjacent said first optical element,~~
~~and wherein the shape of said second optical element is different than the shape of said~~
~~first optical element.~~

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2. The device of claim 1, wherein said optical elements are transparent.

3. The device of claim 1, wherein said optical elements are reflective.

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4. The device of claim 1, wherein said optical elements include micro-wedges with planar output surfaces.

5. The device of claim 1, wherein said optical elements include non-planar output surfaces.

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6. The device of claim 1, further comprising a lens for performing a Fourier transform operation.

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7. The device of claim 1, further comprising a device for optically modifying said incident light beam.

8. The device of claim 1, wherein said optical elements are arranged to split the incident light beam.

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9. An optical system, comprising:
a light source for providing a light beam; and
an optical device for homogenizing said beam, said optical device including adjacent optical elements for forming respective non-adjacent portions of an angular

pattern, and wherein said optical elements have different three-dimensional configurations.

10. The system of claim 9, wherein said device is transparent.

11. The system of claim 10, wherein said optical elements include planar output surfaces.

12. A method of making an optical device, said method comprising the steps of:

dividing an angular pattern into a plurality of sub-angular regions;

determining micro-wedge configurations for directing light to said sub-angular regions; and

subsequently, generating an array of micro-wedges according to said micro-wedge configurations, such that adjacent micro-wedges in said array have different configurations.

13. The method of claim 12, wherein the two-dimensional arrangement of said micro-wedges in said array is essentially random with respect to the two-dimensional arrangement of said sub-angular regions of said pattern.

14. The method of claim 13, further comprising the step of assigning said micro-wedge configurations to random locations in said array.

15. The method of claim 14, wherein said determining step includes the step of calculating output surface slopes for said micro-wedges.

16. The method of claim 15, wherein said step of generating said array includes the step of forming phase tare surfaces in said micro-wedges.

17. The method of claim 16, wherein said generating step includes the step of forming output surfaces for said micro-wedges.

18. [REDACTED] method of claim 12, further comprising the step of providing a plurality of tiles of said micro-wedge arrays.

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